

SUGGESTIONS FOR FURTHER RESEARCH ON THE PATENT SYSTEM

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Dec. 21, 2014

Submitted to the Harvard/MIT/INET/CIGI research agenda workshop:

”Governing Innovation: the law, economics, and political economy of patent systems.”

January 16-17, 2015 at the Harvard Kennedy School.

Introductory remarks:

The following suggestions are for research about the patent system in general (ie somewhat different from personal research priorities and patent reform priorities) in the context of technology and innovation, formulated provocatively brief and with indications of research problems. The focus is on patents, but could in most cases be on IPRs in general, and on long-run broad based comprehensive research rather than on trouble-shooting, and in a reformist/constructivist rather than abolitionist spirit.

A. The effectiveness and efficiency of the patent system in governance in and of different innovation systems.

1. Are there evolutionary biological foundations of stable patent-like systems related to the nature of human information processing and increasingly complex social interaction?
2. How do IPRs compare to physical property rights in evolutionary law? (Side question: Why are many patent lawyers so aggressive on entitlements compared to say real estate lawyers?)
3. Which parsimonious fundamental economic principles could be found as a unifying basis for different IPRs, ie is there a general utilitarian theory of IPRs?
4. How do civil and common law compare as to the efficiency of patent rights for innovation governance?
5. What are the roles of the patent system for effective innovation governance in such different innovation systems as the university, cultural, military, health, national, global, and open innovation systems?
6. What is the economic and governing role of disclosure of invention information in the patent system?
7. What are the governance costs (transaction costs, administrative and management costs) of the patent system and how could they be reduced (eg litigation costs)?
8. What are the private and social rates of RoI on investments in patenting?
9. What are the optimal patent granting and maintenance criteria (ie jointly optimal subject matter, priority ground, revocation ground, scope, inventive step, novelty criteria, duration and fee structure) and what are the unifying economic and legal principles for those criteria or possibly other ones.
10. What are the causes and consequences of patent infringement, patent litigation and threats thereof and how could models for IP dispute resolution and IP damage calculations and criteria for injunctions be improved and harmonized?
11. What is the optimal (or proper) design of the institutional agency structure and roles for running a global patent system? Eg should a patent office have more say on validity and infringement issues in light of the potential invalidation rates? Should willingness to license be incentivized at the application and/or maintenance stage?
Reversely- where are all the devils in the details in the patent system?

13. What are and should be the proper responses by the patent system to waves of new technologies, infocom technologies and biohealth technologies in particular?
14. How could ICTs and artificial intelligence be used to make the patent system, patent markets and patent management more efficient, ie how could computer assisted patenting and computer assisted patent license markets be developed?

B. The effectiveness and efficiency of technology and patent/license markets and their regulation.

1. What are the idiosyncracies of technology and patent/license markets and their consequences for market design and regulation (eg regarding two-sidedness, thinness, information asymmetries across market and regulatory agents, uncertainty, opportunism, allocation of rights and risks, intermediation, local market dominance, leveraging, reach through rights, multiple marginalization, competing standards, royalty stacking, patent pools and political capture risks)?
2. How could patent portfolios be structured, valued and with what price structures and levels?
3. How could FRAND-like contractual terms be more precisely specified and "optionalized" and implemented voluntarily/compulsory in different types of transactions, e g in standardization and licensing of SEPs or in compulsory licensing ?
4. What economic and legal roles does transparency/intransparency play and should play in licensing deals with various deal structures and how could transparency be increased, eg regarding chains (networks) of ownership of patent rights?

C. Old/new IP (business) practices and their uses/abuses

1. What are the different types of practices of NPEs and IP privateers and their causes and consequences?
2. What are best, good and worst practices of SSOs and SEP holders in standard setting and SEP licensing ?
3. What strategies are used and useable for evergreening and multiprotection and with what business and political economy effects?
4. How and how much are cross-border IP licensing used for income shifting by MNCs and NPEs for tax planning/avoidance and what is the role of different tax regimes like territorial taxation?
5. What are the different practices in, incentives for and economic effects of IP donations?
6. What auctioning models are optimal in some sense in different patent and licensing situations?
7. How could different IP assembly and disassembly problems be managed by businesses and policy makers?
8. How sensitive is the patent system to strategic gaming by its users and how could it be made more robust by regulators/legislators/policy-makers/courts?

